VeriFine™ is the industry standard for verification allowing fine defect identification for fine-line PCB applications.

The VeriFine verification system is optimized for fine-line, high-end HDI, advanced flex and packaging applications. The system sets new standards of image quality, throughput, and ease-of-use for the verification of advanced applications.

Benefits:

- Unsurpassed image quality
- Ease-of-use for maximum productivity
- Operated with virtually no additional training
- Compact, ergonomic design maximizes operator efficiency
- Easy defect classification for process control
VeriFine™

Unsurpassed Image Quality

VeriFine’s advanced optical head is designed with a high-resolution camera delivering powerful magnification to guarantee an excellent view of defects under 3 micron. VeriFine systems are equipped with 3 independently controlled illumination channels: coaxial, diffusive, and grazing light - providing superb imaging of a large variety of materials. Dedicated algorithms developed for VeriFine further enhance the image quality and provide the best ever image of defects areas.

Compact and Compatible

VeriFine’s compact design requires minimal floor space. It supports Orbotech’s full range of AOI systems and can be operated with virtually no additional training. A plug-and-play system, VeriFine doesn’t require a constant air supply flow.

Ease-of-use for Fast Verification

VeriFine’s fast X/Y motion system and ergonomic design maximize operator efficiency and throughput. VeriFine improves working conditions by offering:

- Easy access and within a close range working distance to the defect area
- An accurate X/Y system placing the defect at the center of the image
- Tilted table for easy access to the defect area
- Auto focus and vacuum flattening that ensure all defects are in focus
- Small, movable defect reclassification keypad
- Laser pointer
- Multilingual software

Specifications:

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Panel Size</td>
<td>26” x 28” (660mm x 712mm)</td>
</tr>
<tr>
<td>Maximum Inspection Area</td>
<td>24” x 26” (610mm x 660mm)</td>
</tr>
<tr>
<td>Panel Thickness</td>
<td>0-400mil (0-10mm)</td>
</tr>
<tr>
<td>Transition Time Between Defects</td>
<td>Maximum: 1 second</td>
</tr>
<tr>
<td></td>
<td>Typical: 0.5 of a second</td>
</tr>
<tr>
<td></td>
<td>Motion speed: 700mm/sec</td>
</tr>
<tr>
<td>Zoom Magnification Range</td>
<td>105x-250x</td>
</tr>
<tr>
<td>Field of View</td>
<td>1.0mm-2.5mm</td>
</tr>
<tr>
<td>Illumination</td>
<td>3 independently controlled illumination types (LED-based): coaxial, diffusive, grazing</td>
</tr>
<tr>
<td>Working Distance*</td>
<td>2.5” (64mm)</td>
</tr>
<tr>
<td>Applications Supported</td>
<td>All HDI, flex and packaging types at all production stages</td>
</tr>
<tr>
<td>Feature Measurement</td>
<td>Down to 2 micron</td>
</tr>
<tr>
<td>Image Display</td>
<td>High-resolution adjustable 17” flat panel display</td>
</tr>
<tr>
<td>Panel Handling</td>
<td>Vacuum table, pins and pin-less panel mounting</td>
</tr>
<tr>
<td>AOI Systems Supported</td>
<td>Orbotech Discovery™, InSpire™, PC™, SK™, Vision™, Spiron™, PC-Micro-II™ and InFinex™ series</td>
</tr>
<tr>
<td>Physical Dimensions</td>
<td>49.2” width x 49.6” depth x 47.2 - 63” height (adjustable) (125cm x 126cm x 120-160cm)</td>
</tr>
</tbody>
</table>

* From Diffusive Illumination module
** VeriFine is class 1 laser products according to IEC 60825-1 containing a class 2 laser. Laser Specifications: Red laser diode, 635nm, <1mw max power.
* Specifications are subject to change without notice.

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